

**CLAIMS: I CLAIM:**

- A cylinder head with valve train mechanism for opening and closing the cylinders of an internal combustion engine having an engine block with cylinders therein and a piston operatively disposed in each of the cylinder to define one end portion of a respective combustion chamber therein, a cylinder head operatively disposed on said engine block and having a recess there aligned with said cylinder to define a respective second end portion of said combustion chamber, first and second intake valves and first and second exhaust valves, valve seats for each of said valves, each said valves having an enlarged portion for operative engagement with one of said valve seats and having an elongated stem portion extending from said head portion through a stem opening in said cylinder head, each pair of stem portions of same function valves inclined so as to diverge away from the paired stem axis of the other function valves, the axis being normal to the rotational axis of the crankshaft, a yoke freely pivoting along a line parallel to each pair of same function valves, having mating grooves contacting the tops of the same function valves, a rocker arm pivoted on a rocker shaft and having one end thereof engaging the center of said yoke, the other end engaging one end of a hydraulic tappet, the opposite end of the said hydraulic tappet engaging an engine driven camshaft, the said yoke disposed by the said rocker arm to move each pair of same function valves in an inclined plane normal to the rotational center axes of said engine, the arrangement of said intake valves, said exhaust valves, said rocker arms, and said yokes being such that sufficient space is provided in the cylinder head to accommodate a combustion initiation device centrally of said valves.